


## "ICT's Role Towards a Knowledge Economy"

From M-Transactions to M-Commerce  
**9th Annual ICT Conference**

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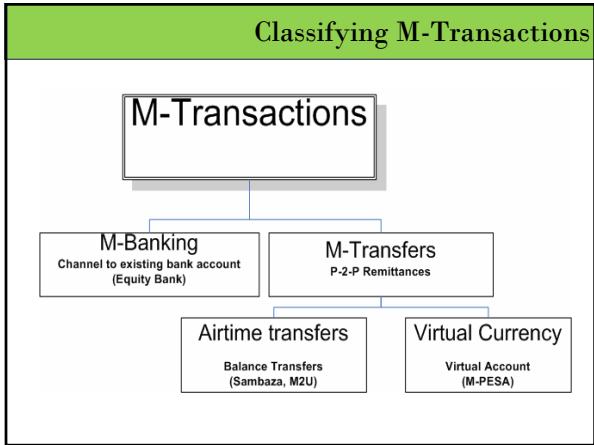
## The Integration

Mobile  
Telephony

M-Transactions  
in developing  
countries


Retail  
Financial  
Services

- Philippines (SmartMoney): 2000
- Philippines (G-Cash): 2004
- Kenya (M-Pesa): 2005
- Zambia and DRC (Celpay): 2002
- South Africa (MTN M-Banking): 2005
- South Africa (Wizzit): 2005
- South Africa (Paym8): 2003




## Kenyan Players


- Telecommunication Companies
  - M-PPESA
  - Sokotele
- Banks
  - Equity bank
  - KCB
- Microfinance Institutions
  - Faulu Kenya
  - Jamii Bora
- Merchants
  - Nation Media
  - Nakumatt



## Geographical Coverage



Map 1 – Safaricom geographical coverage  
<http://www.safaricom.co.ke>



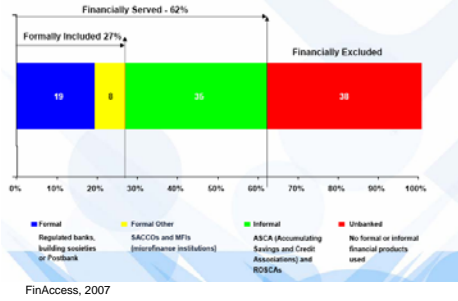
Map 2 – Celtel geographical coverage  
<http://www.celitel.com>

## Opportunities

- Significant economic benefits
- Extending financial services
- Stimulate more changes in financial sector
- Increased competition
- Cross-boarder banking services
- M-commerce

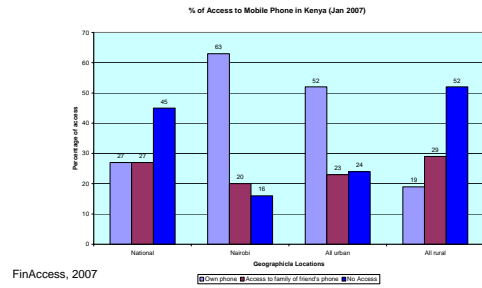
## Driving Forces

- Poor access to financial services



## Driving Forces

- Mobile phone adoption



## Driving Forces

- Cost of transaction

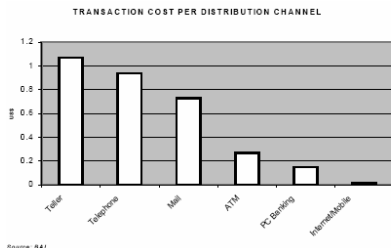


Figure 1: Illustrative costs per distribution channel  
Source: Quoted in Ketley and Duminy 2003

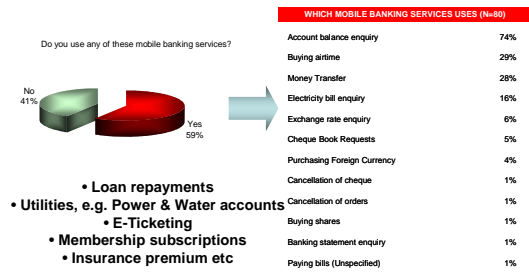
FinAccess, 2007

## Sample Success Story

- In first 8 months after launch of M-PESA
  - 900,000 customers registered
  - 1,200 Agents nationwide
  - Daily 'Send Money' Average for Oct '07 41 Million KShs
  - Average transaction values ~5,000 KShs
  - Cumulative 'Send Money' 4 Billion KShs

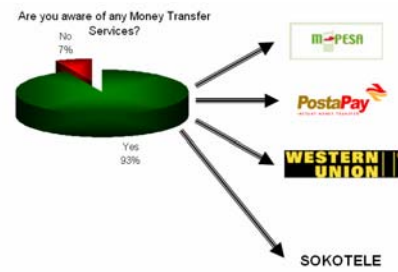
## Services Being Used

Formal and informal



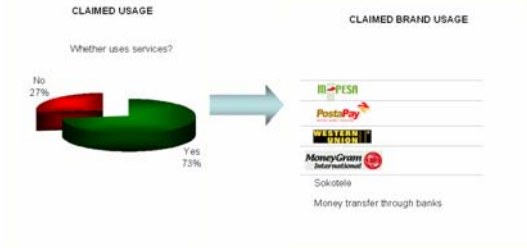
## Penetration of Technologies

AWARENESS



## Penetration of Technologies

### USAGE



Steadman group, 2008

## M-Banking Services Offered by Kenyan Banks



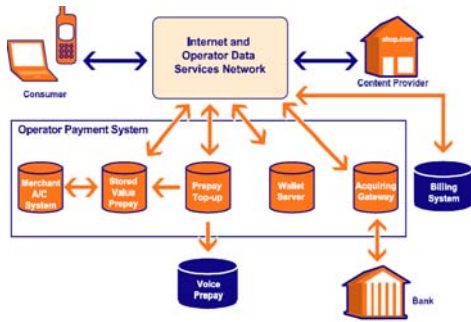
- Account balance enquiry
- Mini Statements
- Purchase of Airtime
- Forwarding airtime to other recipient
- Change of PIN
- Paying for Electricity bill (KPLC)



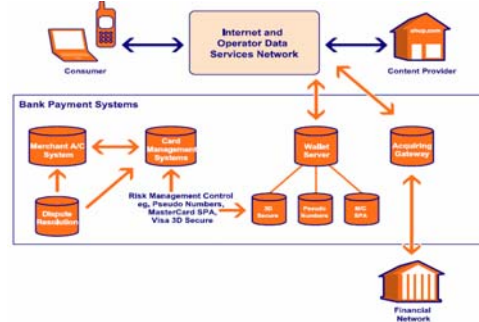
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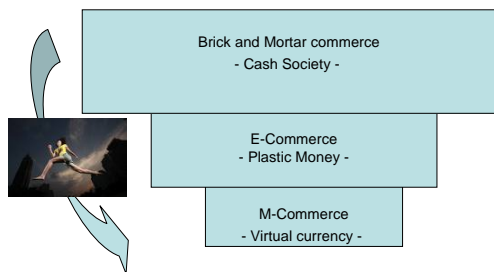
## Operator M-Payment Systems



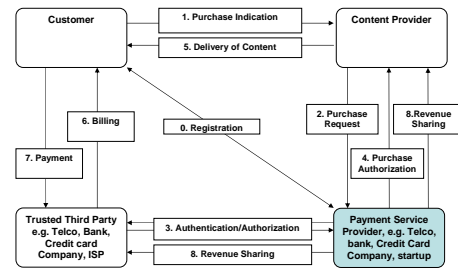
## Financial Institutions M-Payment Systems



## M-transactions to M-Commerce



## M-transactions to M-Commerce



Source: Telkom Media Network, 2002

## ECOSYSTEM

“3 rules of retail are location, location, location.

In m-money, they're partnership, partnership, partnership.

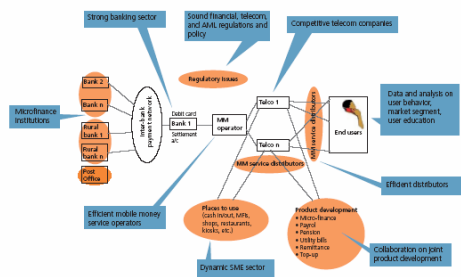
We need to create a mesh of partnerships covering various networks of relationships.”

NAPOLEON NAZARENO, PRESIDENT, SMART COMMUNICATIONS, Cairo 2008

## ECOSYSTEM - Players

Players	Assets and Capabilities	Utilities
MNOs	<ul style="list-style-type: none"> <li>Mobile infrastructure</li> <li>Extensive retail outlet/agent networks</li> <li>Massive customer base that include low-income segments</li> <li>Strong branding</li> <li>Customer trust</li> <li>Customer service structures</li> <li>Ability to make good margins on low ARPUs</li> </ul>	<ul style="list-style-type: none"> <li>Periodic billing and collection</li> </ul>
Banks	<ul style="list-style-type: none"> <li>Banking license and infrastructure</li> <li>Ability to facilitate foreign exchange, clearing, and settlement</li> <li>Regulatory compliance expertise</li> <li>Retail outlet networks (though significantly more limited than those of MNOs)</li> </ul>	<ul style="list-style-type: none"> <li>Skills                             <ul style="list-style-type: none"> <li>Service presence among low-income segments</li> <li>Regular communication with low-income clients</li> <li>Knowledge of low-income clients' habits and needs</li> </ul> </li> <li>Employees                             <ul style="list-style-type: none"> <li>Existing periodic payroll distribution to employees</li> </ul> </li> <li>Regulators                             <ul style="list-style-type: none"> <li>Authority to impose regulation and monitor and enforce compliance</li> </ul> </li> <li>IFIs and Donors                             <ul style="list-style-type: none"> <li>Contact, experience, and expertise across countries, sectors, and industries</li> <li>Credibility with regulators</li> <li>Comprehensive suite of relevant functions</li> <li>International presence</li> </ul> </li> <li>Civil Society                             <ul style="list-style-type: none"> <li>Local contacts and knowledge in low-income markets</li> <li>Credibility and trust</li> <li>Relevant operations</li> </ul> </li> <li>End Users                             <ul style="list-style-type: none"> <li>Relevant needs</li> </ul> </li> </ul>
Agents	<ul style="list-style-type: none"> <li>Physical points of presence</li> <li>Customer trust (in some cases)</li> <li>Knowledge of customer usage habits and needs</li> </ul>	
Retailers	<ul style="list-style-type: none"> <li>Physical points of presence</li> </ul>	

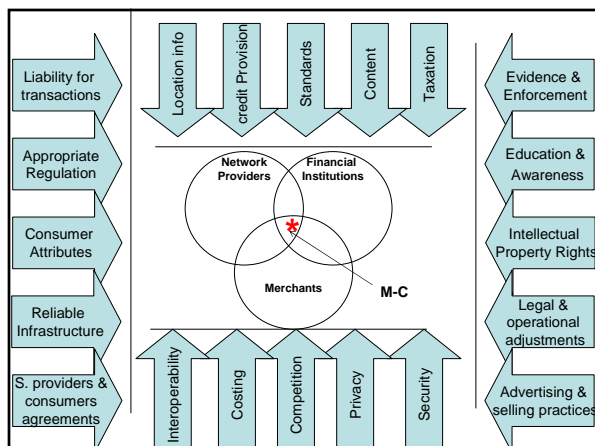
## ECOSYSTEM



Source: IFC

## ECOSYSTEM

# Ecosystem Issues



Contributing to the M-Transactions discussions!

Thank You

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